LakeCounty
Health Department and
Community Health Center

Myth: Too Many Vaccines May Overwhelm a Baby's Immune System

How many doses of vaccine does a baby get?
In the US, children receive as many as 26 innoculations by 2 years of age depending on which combination of vaccines is used by the provider. These vaccines protect against 14 viral and bacterial diseases.

How did this myth get started?
Just a few decades ago, children received a total of seven (7) vaccines, protecting against 7 different diseases. Now the number of vaccines has more than tripled, and the child is protected from twice as many disease. It would seem that increasing the number of vaccines from 7 to 26 is a huge burden on a developing child's immune system. But now the number of bacterial or viral proteins that the child is exposed to is far less than in the past

How many bacterial or viral proteins is a child exposed to?
Thirty years ago, a fully vaccinated child would have been exposed to over 3,000 germ particle (antigens) during the course of their seven vaccinations. Now, children receive more than triple the number of shots, but are exposed to only 150 germ proteins. They are now exposed to only 5% of what the number of antigens that they used to be exposed to in vaccines. Scientific advances have allowed researchers and manufacturers to create vaccines that are just as effective as before, but more pure and easier on the immune system.

While that number may seem high, it needs to be taken in context with what the baby is exposed to on a daily basis. An infant is exposed to thousands of bacteria at birth and thousands more germs each day. Babies are born with a fully functional immune system at birth to deal with the germy world around them. In fact, their immune systems are better able to handle all the germs than an older child or adult could. The 150 immunological particles that they are exposed to in vaccines over the course of two years is miniscule in comparison to what they are exposed to each day of their lives.

How many vaccines at one time is too many?
In theory, a child could successfully respond to up to 10,000 vaccines. They receive less thn 1% of the number of vaccines that they could potentially handle.

Won't it cause my baby a lot of trauma if he/she gets so many shots all at once?
While the first shot may cause a child significant stress, there is no evidence that additional shots do not appear to cause more of a traumatic experience. In addition, if shots are spaced out so that they child has fewer shots at one visit, they will have to have more visits to get their shots completed, so the child will be anxious and afraid at a greater number of visits.

If I am still concerned, should I space the vaccines out so they are only getting one or two at a time?
No. The CDC recommends vaccines to children or adults in specific age groups according to how susceptible they are to a certain disease at their age. While it may not seem like such a big deal to delay a shot, there have been many recent outbreaks of vaccine-preventable diseases due to children being under-vaccinated or not vaccinate at all. Take measles for example. In 1994, measles had been eliminated from the United States. In the late 1990s, some parents became afraid of the measles, mumps and rubella vaccine. If we stop vaccinating in a timely fashion, the diseases that seem so rare now will re-emerge.

Spacing out or delaying vaccines will only increase the time that your child is at risk for those vaccine-preventable illnesses. A choice not to vaccinate is a risky choice.

Where can I get more information?
http://www.cdc.gov/vaccinesafety/index.html
http://www.chop.edu/service/vaccine-education-center
http://www.vaccineinformation.org/
http://www.healthychildren.org/english/health-issues/vaccine-preventable-diseases/Pages/default.aspx